

Online Appendix “Copy thy neighbour: Spatial interdependences in the democracy-repression nexus” (Journal of Human Rights)

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A1. Estimation strategy: Spatial OLS and Spatial Maximum Likelihood models

Two assumptions were made to estimate the spatial interdependence in repression and democracy. Firstly, the empirical analysis assumed that countries require time to observe repression levels in their neighbourhood and international reactions to it. As such, there was a time lagged response in adjusting domestic levels of repression at time t based on neighbouring levels of repression at $t-1$. However, this assumption holds, and makes S-OLS an appropriate estimation procedure, only if the first observation in the data is fixed in repeated sample (i.e. there is no stochastic element to it). If this assumption does not hold, then we may need to estimate our models using a Spatial Maximum Likelihood (S-ML) model. Franzese and Hays (2007) assess various specification and estimation choices in terms of asymptotic properties and small sample performance, and find that the Spatial Maximum Likelihood offers “*weakly dominant efficiency and generally solid performance in unbiasedness and SE [standard error] accuracy*” as compared to other estimation procedures (Franzese and Hays 2007, 163; 2008). Unfortunately, there is not statistical software tool (to the author’s knowledge) that allows the estimation of an S-ML model while also accounting for the measurement error in latent measurements of the dependent and independent variables.

Then, the paper makes a trade-off between using the most efficient and accurate estimation model and incorporating the measurement error in the estimation strategy. However, this trade off does not pose a significant challenge to the inferences drawn in the paper for two

reasons. Firstly, Franzese & Hays (2007, 2008) show that the S-ML model outperforms the S-OLS only in the cases when the spatial coefficient ρ is higher than 0.3. In the case of the paper, the reported ρ is below that threshold at around 0.1. Secondly, re-estimating the Spatial Durbin model (Model 4) using both S-OLS and S-ML estimation (without accounting for measurement error) results consistent with the ones reported in the main body of the paper. Table A1 below summarizes an S-OLS model similar to Model 4 in the main body of the paper. This indicates that repression diffuses at a regional level, but the coefficient size of ρ is only a tenth of the one reported in the paper (0.100) when measurement error is accounted for empirically. More importantly, the inclusion of the spatial lag in the model renders the coefficient for democracy negative and statistically insignificant, which contradicts all the empirical and theoretical work on the democracy-repression nexus. Next, Model A2 and A3 are estimated via Spatial Maximum Likelihood, the former model containing a temporally lagged spatial lag (Model A2) while the latter contains a contemporaneous spatial lag (Model A3). The spatial coefficient for repression is positive and statistically significant, again reinforcing the findings reported in the main text of the paper. However, the coefficient for democracy is negative and statistically significant in these two S-ML models, again indicating that Galton's problem may be present in current models estimating the effect of democracy on repression.

Table A1. Maximum likelihood spatial models with lagged and contemporaneous spatial lags, 1947-2007.

VARIABLES	Model A1 – S-OLS	Model A2 – S-ML	Model A3- S-ML
Electoral Democracy Index t-1	-0.0430* (0.0238)	-0.0516** (0.0229)	-0.0510** (0.0229)
Spatial coefficient ρ at t-1	0.00951* (0.00498)	0.00374*** (1.02e-05)	--
Spatial coefficient ρ at t	--	--	0.00890*** (1.69e-05)
Spatial lag democracy t-1	0.0177 (0.0250)	0.0362* (0.0220)	0.0326 (0.0220)
GDP growth t-1	-0.000208 (0.000572)	-0.000239 (0.000561)	-0.000233 (0.000561)
GDP/capita ln t-1	-0.0172** (0.00872)	-0.0166* (0.00856)	-0.0165* (0.00855)
Population (1000s) ln t-1	-0.0238 (0.0171)	-0.0247 (0.0168)	-0.0244 (0.0168)
Civil war UCDP	-0.0530*** (0.0142)	-0.0538*** (0.0139)	-0.0539*** (0.0139)
International war UCDP	-0.0429*** (0.0161)	-0.0429*** (0.0158)	-0.0426*** (0.0158)
Resource Dependence t-1	-0.000336 (0.000344)	-0.000303 (0.000338)	-0.000305 (0.000337)
Lagged DV	0.961*** (0.00443)	0.963*** (0.00386)	0.961*** (0.00386)
Constant	0.562** (0.220)	0.568*** (0.216)	0.574*** (0.215)
Observations	5,870	5,870	5,870

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1.

A2. Alternative measures of democracy

The literature on the conceptualization and operationalization of democracy has not reached a consensus on best practices of measuring democracy (Pemstein, Meserve, and Melton 2010; Coppedge et al 2019). Since it's beyond the scope of this paper to ascertain the best way to measure democracy, several alternative measures of democracy are used to examine how the choice of democracy measurement affects the results. Then, the models from Table 3 of the main text are re-estimated with the following measures of democracy: the

Unified Democracy Scores (UDS) (Pemstein et al. 2010), *Polity IV* scale by Marshall, Jaggers, and Gurr (2010), the *Democracy-Dictatorship* (DD) regime categorization by Cheibub, Gandhi, and Vreeland (2010) and *Boix-Miller-Rosato* (BMR) dichotomous coding of democracy (Boix, Miller and Rosato 2013). Table A2 below summarizes the alternative democracy measures used, while Table A3 to A10 summarize the estimated models. We observe that the size of the coefficient for democracy drop in all the spatial models (SAR, SLX or SDM) compared to the non-spatial OLS model. While the drop in the coefficient size varies between measures, this is consistent across the different models and specifications. This lends support to the claim that by not modelling spatial dependence in models of the democracy-repression nexus, current literature tends to overestimate the effect of democracy. Next, the results from Tables A3-A10 show that, regardless of the democracy measure used, regional levels of democracy do not have a significant effect on domestic levels of repression. Finally, the diffusion effect in repression is systematic across the different model specifications, it is consistently positive and statistically significant.

Democracy variable	Conceptualization	Measurement
Unified Democracy Scores (UDS)	The Unified Democracy Scores are estimated using a Bayesian statistical measurement model using ten different measures of democracy. The purpose of the data is to provide a cumulative approach in measuring democracy based on the efforts of previous scholars. The measure combines both substantive and procedural measures of democracy (see Pemstein et al. 2010).	Continuous: -2.1112 (least democratic) to 2.254 (most democratic)
Polity IV	A mature and internally coherent democracy, can be operationally defined as one in which (a) political participation is unrestricted, open, and fully competitive; (b) executive recruitment is elective, and (c) constraints on the chief executive are substantial. (Marshall et al. 2010: 15)	Interval: ranges between -10 (most autocratic) and 10 (most democratic). It was rescaled to range from 0 to 20, with lower values indicating autocracies and higher values democracies.
Democracy-Dictatorship (DD) regime classification	A country is classified as a democracy if it meets the following criteria (Cheibub et al. 2010: 69): 1. The chief executive is chosen by popular election or by a body that was itself popularly elected. 2. The legislature is popularly elected. 3. There is more than one party competing in the elections. 4. An alternation in power under electoral rules identical to the ones that	Dichotomous: 0 (autocracy) and 1 (democracy)

	brought the incumbent to office must have taken place.	
Boix-Miller-Rossato (BMR) regime classification	<p>A country is defined as democratic if it meets the following criteria (Boix et al. 2013: 1531):</p> <ol style="list-style-type: none"> 1. The executive is directly or indirectly elected in popular elections and is responsible either directly to voters or to a legislature. 2. The legislature (or the executive if elected directly) is chosen in free and fair elections. 3. A majority of adult men has the right to vote. 	Dichotomous: 0 (autocracy) and 1 (democracy)

Table A3. Non-Spatial (NS) and Spatial Autoregressive (UDS)

VARIABLES	Model A4 NS			Model A5 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.059	0.102	-0.571	2.826	0.790	3.575
Lagged DV	0.865	0.010	89.528	0.696	0.014	51.145
Spatial coefficient ρ t-1	--	--	--	0.096	0.014	6.735
Spatial lag of democracy t-1	--	--	--	--	--	--
Unified Democracy Score t-1	0.077	0.013	6.028	0.058	0.019	3.058
GDP growth t-1	0.0005	0.001	0.357	0.001	0.002	0.357
GDP/capita ln t-1	0.049	0.011	4.447	0.082	0.031	2.647
Population (1000s) ln t-1	-0.041	0.006	-6.308	-0.340	0.062	-5.470
Civil war	-0.197	0.043	-4.580	-0.241	0.046	-5.243
International war	-0.085	0.053	-1.625	-0.068	0.053	-1.268
Resource Dependence t-1	-0.001	0.001	-1.137	-0.002	0.001	-1.322
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A4. Spatial Lag of X (SLX) and Spatial Durbin (SDM) models (UDS)

VARIABLES	Model A6 SLX			Model A7 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	3.056	0.796	3.836	2.811	0.791	3.556
Lagged DV	0.725	0.013	56.704	0.695	0.014	50.976
Spatial coefficient ρ t-1	--	--	--	0.100	0.015	6.556
Spatial lag of democracy t-1	0.029	0.021	1.405	-0.018	0.022	-0.818
Unified Democracy Score t-1	0.056	0.020	2.811	0.063	0.020	3.153
GDP growth t-1	0.0003	0.002	0.172	0.001	0.002	0.344
GDP/capita ln t-1	0.094	0.032	2.991	0.083	0.031	2.675
Population (1000s) ln t-1	-0.368	0.063	-5.882	-0.340	0.062	-5.460
Civil war	-0.257	0.046	-5.571	-0.240	0.046	-5.237
International war	-0.074	0.054	-1.365	-0.069	0.053	-1.286
Resource Dependence t-1	-0.001	0.001	-1.023	-0.002	0.001	-1.346
Country and Year FE	Yes			Yes		
Observations	5,870			5,870		

Table A5. Non-Spatial (NS) and Spatial Autoregressive (Polity IV)

VARIABLES	Model 6 NS			Model 6 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.250	0.096	-2.616	2.799	0.785	3.567
Lagged DV	0.872	0.010	91.696	0.697	0.014	50.099
Spatial coefficient ρ t-1	--	--	--	0.098	0.015	6.652
Spatial lag of democracy t-1	--	--	--	--	--	--
Polity IV t-1	0.008	0.002	5.143	0.007	0.002	3.188
GDP growth t-1	0.0005	0.001	0.329	0.001	0.002	0.344
GDP/capita ln t-1	0.059	0.011	5.534	0.087	0.031	2.777
Population (1000s) ln t-1	-0.038	0.006	-5.866	-0.352	0.062	-5.714
Civil war	-0.195	0.043	-4.531	-0.241	0.046	-5.293
International war	-0.086	0.053	-1.609	-0.068	0.054	-1.266
Resource Dependence t-1	-0.001	0.001	-1.730	-0.002	0.001	-1.254
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A6. Spatial Lag of X (SLX) and Spatial Durbin (SDM) models (Polity IV)

VARIABLES	Model 6 SLX			Model 6 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	3.016	0.791	3.812	2.809	0.785	3.580
Lagged DV	0.728	0.013	55.911	0.695	0.014	49.797
Spatial coefficient ρ t-1	--	--	--	0.105	0.015	6.774
Spatial lag of democracy t-1	0.001	0.003	0.507	-0.005	0.003	-1.692
Polity IV t-1	0.007	0.002	2.700	0.009	0.002	3.604
GDP growth t-1	0.0002	0.002	0.115	0.001	0.002	0.336
GDP/capita ln t-1	0.102	0.032	3.197	0.089	0.032	2.832
Population (1000s) ln t-1	-0.383	0.062	-6.168	-0.351	0.062	-5.688
Civil war	-0.259	0.046	-5.620	-0.241	0.046	-5.280
International war	-0.075	0.055	-1.377	-0.072	0.054	-1.323
Resource Dependence t-1	-0.001	0.001	-0.968	-0.002	0.001	-1.279
Country and Year FE	Yes			Yes		
Observations	5,870			5,870		

Table A7. Non-Spatial (NS) and Spatial Autoregressive (DD)

VARIABLES	Model 7 NS			Model 7 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.248	0.098	-2.530	2.896	0.784	3.693
Lagged DV	0.879	0.009	95.039	0.699	0.014	50.569
Spatial coefficient ρ t-1	--	--	--	0.098	0.015	6.613
Spatial lag of democracy t-1	--	--	--	--	--	--
DD index t-1	0.083	0.022	3.790	0.077	0.030	2.597
GDP growth t-1	0.0005	0.001	0.349	0.001	0.002	0.303
GDP/capita ln t-1	0.063	0.011	5.814	0.081	0.032	2.558
Population (1000s) ln t-1	-0.036	0.006	-5.568	-0.353	0.062	-5.734
Civil war	-0.186	0.043	-4.317	-0.242	0.046	-5.309
International war	-0.079	0.053	-1.482	-0.065	0.054	-1.198
Resource Dependence t-1	-0.002	0.001	-2.512	-0.002	0.001	-1.261
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A8. Spatial Lag of X (SLX) and Spatial Durbin (SDM) models (DD)

VARIABLES	Model 7 SLX			Model 7 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	3.157	0.791	3.993	2.890	0.785	3.681
Lagged DV	0.729	0.013	56.282	0.699	0.014	50.534
Spatial coefficient ρ t-1	--	--	--	0.098	0.015	6.436
Spatial lag of democracy t-1	0.068	0.043	1.577	-0.010	0.044	-0.226
DD index t-1	0.063	0.033	1.922	0.080	0.032	2.473
GDP growth t-1	0.0001	0.002	0.070	0.001	0.002	0.305
GDP/capita ln t-1	0.094	0.032	2.967	0.081	0.032	2.558
Population (1000s) ln t-1	-0.387	0.062	-6.244	-0.353	0.062	-5.713
Civil war	-0.260	0.046	-5.648	-0.242	0.046	-5.303
International war	-0.071	0.055	-1.307	-0.065	0.054	-1.199
Resource Dependence t-1	-0.001	0.001	-0.931	-0.002	0.001	-1.268
Country and Year FE	Yes			Yes		
Observations	5,870			5,870		

Table A9. Non-Spatial (NS) and Spatial Autoregressive (Boix-Miller-Rosato)

VARIABLES	Model 8 NS			Model 8 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.246	0.098	-2.517	2.901	0.784	3.700
Lagged DV	0.877	0.009	93.705	0.698	0.014	50.336
Spatial coefficient ρ t-1	--	--	--	0.098	0.015	6.609
Spatial lag of democracy t-1	--	--	--	--	--	--
BMR index t-1	0.090	0.022	4.038	0.078	0.030	2.583
GDP growth t-1	0.001	0.001	0.434	0.001	0.002	0.327
GDP/capita ln t-1	0.063	0.011	5.787	0.080	0.032	2.521
Population (1000s) ln t-1	-0.036	0.006	-5.586	-0.353	0.062	-5.734
Civil war	-0.191	0.043	-4.425	-0.243	0.046	-5.325
International war	-0.081	0.053	-1.518	-0.065	0.054	-1.207
Resource Dependence t-1	-0.002	0.001	-2.460	-0.001	0.001	-1.238
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A10. Spatial Lag of X (SLX) and Spatial Durbin (SDM) models (BMR)

VARIABLES	Model 8 SLX			Model 8 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	3.171	0.791	4.011	2.888	0.785	3.677
Lagged DV	0.728	0.013	55.983	0.698	0.014	50.287
Spatial coefficient ρ t-1	--	--	--	0.099	0.015	6.458
Spatial lag of democracy t-1	0.065	0.044	1.486	-0.016	0.045	-0.368
BMR index t-1	0.064	0.033	1.928	0.083	0.033	2.519
GDP growth t-1	0.0002	0.002	0.113	0.001	0.002	0.327
GDP/capita ln t-1	0.092	0.032	2.892	0.080	0.032	2.529
Population (1000s) ln t-1	-0.387	0.062	-6.246	-0.352	0.062	-5.704
Civil war	-0.262	0.046	-5.673	-0.243	0.046	-5.314
International war	-0.072	0.055	-1.310	-0.065	0.054	-1.212
Resource Dependence t-1	-0.001	0.001	-0.933	-0.002	0.001	-1.246
Country and Year FE	Yes			Yes		
Observations	5,870			5,870		

A3. Alternative measures of repression

The robustness of the findings is tested by using two alternative measures of repression from V-Dem (Coppedge et al 2019). Precisely, V-Dem offers continuous latent estimates and uncertainty measures of protection from torture and political killings in time series cross-sectional format appropriate for spatial analysis. Fariss (2018) shows that his measure of human rights performance and the measures from V-Dem have similar temporal dynamics, which makes them viable alternatives for the dependent variable¹. Then, I re-estimate the main models of the paper (from Table 3) with freedom from political killings and from torture as dependent variables. Tables A11-A15 summarize the models with the alternative measures of repression. Positive values of the measurements indicate freedom from political killing/torture (less repression) while negative values indicate less freedom from political killings/torture (more repression). The results show there is a systematic diffusion effect between levels of political killings and torture between countries situated in the same region. Next, the neighbouring level of democracy exerts a positive effect on freedom from political killings (i.e. less repression), but it has no effect on the freedom from torture. An explanation from this could be that torture, as a repression method, is easier to conceal and it is harder for activists and international observers to uncover instance of torture compared to instance of political killings (Conrad and Moore 2010). The coefficient size of a country's democracy level is positive on freedom from political killings and torture, and its size stays constant throughout different model specifications.

¹ Previous literature has used the Cingranelli-Richards Human Rights Data (Cingranelli and Richards 2010) or the Political Terror scale (Wood and Gibney 2010) to test theories of repression. While these data offered great resources to researchers, they are not appropriate for the estimation of spatial econometric models under known asymptotic properties. The reason for this is that these two measures are not continuous and using them in S-OLS or S-ML model would violate the assumption of continuity of the dependent variable.

Table A11. Diffusion of freedom from torture, 1947-2007.

VARIABLES	Model A8 – NS OLS			Model A9 - SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.855	0.145	-5.904	0.984	1.072	0.918
Lagged DV	0.712	0.013	55.748	0.470	0.017	27.806
Spatial coefficient ρ t-1	--	--	--	0.121	0.016	7.470
Spatial lag of democracy t-1	--	--	--	--	--	--
Electoral Democracy index t-1	1.102	0.078	14.212	1.689	0.123	13.693
GDP growth t-1	-0.0003	0.002	-0.120	-0.002	0.003	-0.824
GDP/capita ln t-1	0.085	0.017	5.161	0.006	0.044	0.136
Population (1000s) ln t-1	-0.025	0.009	-2.797	-0.147	0.081	-1.808
Civil war	-0.141	0.070	-2.008	-0.179	0.072	-2.484
International war	-0.079	0.087	-0.906	-0.022	0.086	-0.259
Resource Dependence t-1	-0.002	0.001	-2.012	-0.002	0.002	-0.929
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A12. Diffusion of freedom from torture, 1947-2007.

VARIABLES	Model A10 - SLX			Model A11 - SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	1.103	1.078	1.023	0.993	1.072	0.926
Lagged DV	0.493	0.017	29.726	0.470	0.017	27.703
Spatial coefficient ρ t-1	--	--	--	0.127	0.019	6.555
Spatial lag of democracy t-1	0.402	0.111	3.615	-0.084	0.132	-0.633
Electoral Democracy index t-1	1.681	0.130	12.913	1.713	0.130	13.184
GDP growth t-1	-0.003	0.003	-0.951	-0.002	0.003	-0.828
GDP/capita ln t-1	0.014	0.044	0.320	0.007	0.044	0.160
Population (1000s) ln t-1	-0.162	0.082	-1.985	-0.147	0.081	-1.808
Civil war	-0.189	0.072	-2.611	-0.179	0.072	-2.485
International war	-0.031	0.086	-0.361	-0.023	0.086	-0.266
Resource Dependence t-1	-0.002	0.002	-0.901	-0.002	0.002	-0.929
Country and Year FE	Yes			Yes		
Observations	5,870			5,870		

Table A13. Diffusion of freedom from political killings, 1947-2007.

VARIABLES	Model A12 – NS OLS			Model A13 - SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-1.123	0.155	-7.233	0.917	1.153	0.795
Lagged DV	0.722	0.013	56.448	0.470	0.016	28.509
Spatial coefficient ρ t-1	--	--	--	0.121	0.015	7.990
Spatial lag of democracy t-1	--	--	--	--	--	--
Electoral Democracy index t-1	0.949	0.076	12.445	1.590	0.123	12.947
GDP growth t-1	-0.002	0.002	-0.949	0.0003	0.003	0.101
GDP/capita ln t-1	0.133	0.018	7.536	0.054	0.045	1.185
Population (1000s) ln t-1	-0.025	0.009	-2.645	-0.149	0.088	-1.690
Civil war	-0.194	0.071	-2.719	-0.231	0.073	-3.172
International war	-0.072	0.090	-0.806	-0.068	0.088	-0.766
Resource Dependence t-1	-0.001	0.001	-1.125	-0.001	0.002	-0.395
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A14. Diffusion of freedom from political killings, 1947-2007.

VARIABLES	Model A14 - SLX			Model A15 - SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	0.520	1.165	0.447	0.857	1.153	0.743
Lagged DV	0.498	0.016	30.750	0.469	0.016	28.488
Spatial coefficient ρ t-1	--	--	--	0.117	0.015	7.608
Spatial lag of democracy t-1	0.349	0.116	3.022	0.202	0.116	1.742
Electoral Democracy index t-1	1.588	0.130	12.260	1.516	0.129	11.746
GDP growth t-1	0.0004	0.003	0.125	0.0004	0.003	0.140
GDP/capita ln t-1	0.056	0.046	1.213	0.050	0.045	1.095
Population (1000s) ln t-1	-0.124	0.089	-1.389	-0.145	0.088	-1.648
Civil war	-0.236	0.073	-3.224	-0.229	0.073	-3.150
International war	-0.080	0.089	-0.897	-0.065	0.088	-0.740
Resource Dependence t-1	-0.001	0.002	-0.377	-0.001	0.002	-0.395
Country and Year FE	Yes			Yes		
	5,870			5,870		

A4. Regional conflict and diffusion of repression

An alternative explanation as to why we observe a diffusion effect for repression is that countries situated in the same region are exposed to similar challenges to their rule and they react similarly to these threats. Furthermore, previous research also indicates that regime repress pre-emptively to prevent conflict from spreading to their own territory (Danneman and Ritter 2014). In order to account for this potential confounding factor, I generate two spatial lags of conflict using the following conflict measures: (1) conflict measured as a binary variable taking a value of 1 if there is an armed incompatibility over the government and/or territory, and there are over 25 battle-related deaths (Gleditsch et al. 2002); (2) a latent measure of conflict that is constructed with an IRT model from eight different protest datasets to account for potential measurement error in our ability to observe and measure conflict (Chenoweth, D’Orazio and Wright 2014). Tables A15-18 re-estimate the main models of the paper with the inclusion of a spatial lag of civil conflict and show that the effect of the diffusion spatial coefficient remains unchanged. Regional conflict has a negative effect on human rights performance (i.e. more repression), but this effect is statistically significant only in the models that do not account for the diffusion of repression (Model A16 NS and A18 SLX). In contrast, the latent measurement of protest exerts a negative effect of human rights performance (more repression) at a domestic level (unit level), but its regional spatial lag does not exert an effect of repression (Models A20-23). The results reported in the paper remain unchanged.

Table A15. Regional civil conflict, diffusion of repression and democracy, 1947-2007.

VARIABLES	Model A16 NS			Model A17 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.120	0.098	-1.225	2.874	0.784	3.668
Lagged DV	0.855	0.010	84.525	0.693	0.014	49.611
Spatial coefficient ρ t-1	--	--	--	0.095	0.015	6.188
Electoral Democracy index t-1	0.316	0.045	6.998	0.248	0.069	3.621
Regional civil war t	-0.209	0.087	-2.406	-0.066	0.110	-0.603
GDP growth t-1	0.001	0.001	0.690	0.001	0.002	0.480
GDP/capita ln t-1	0.042	0.011	3.849	0.076	0.032	2.403
Population (1000s) ln t-1	-0.042	0.007	-6.426	-0.353	0.062	-5.724
Civil war	-0.148	0.047	-3.139	-0.233	0.047	-4.997
International war	-0.086	0.053	-1.621	-0.068	0.054	-1.257
Resource Dependence t-1	-0.001	0.001	-0.862	-0.001	0.001	-1.222
Country and Year FE	No			Yes		
Observations	5,870			5,870		

Table A16. Regional civil conflict, diffusion of repression and democracy, 1947-2007.

VARIABLES	Model A18 SLX			Model A19 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	3.057	0.789	3.877	2.883	0.783	3.680
Lagged DV	0.719	0.013	54.447	0.691	0.014	49.140
Spatial coefficient ρ t-1	--	--	--	0.104	0.017	6.267
Spatial lag of democracy t-1	0.058	0.076	0.760	-0.138	0.082	-1.695
Electoral Democracy index t-1	0.246	0.077	3.211	0.304	0.077	3.973
Regional civil war t	-0.269	0.106	-2.525	-0.058	0.110	-0.527
GDP growth t-1	0.001	0.002	0.307	0.001	0.002	0.459
GDP/capita ln t-1	0.090	0.032	2.839	0.077	0.032	2.453
Population (1000s) ln t-1	-0.383	0.062	-6.185	-0.352	0.062	-5.704
Civil war	-0.228	0.047	-4.840	-0.234	0.047	-5.013
International war	-0.076	0.054	-1.400	-0.069	0.054	-1.281
Resource Dependence t-1	-0.001	0.001	-1.037	-0.002	0.001	-1.243
Country and Year FE		Yes			Yes	
Observations		5,870			5,870	

Table A17. Regional latent conflict, diffusion of repression and democracy, 1955-2007.

VARIABLES	Model A20 NS			Model A21 SAR		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.415	0.119	-3.471	1.128	0.682	1.653
Lagged DV	0.851	0.010	81.595	0.692	0.014	48.597
Spatial coefficient ρ t-1	--	--	--	0.093	0.015	6.208
Spatial lag of democracy t-1	--	--	--	--	--	--
Electoral Democracy index t-1	0.337	0.046	7.407	-0.004	0.012	-0.372
Regional latent conflict t	-0.012	0.010	-1.124	0.232	0.070	3.300
Domestic latent conflict t	-0.030	0.009	-3.249	-0.027	0.010	-2.605
GDP growth t-1	0.001	0.001	0.390	0.001	0.002	0.469
GDP/capita ln t-1	0.058	0.012	5.004	0.076	0.032	2.379
Population (1000s) ln t-1	-0.026	0.007	-3.409	-0.290	0.066	-4.392
Civil war	-0.200	0.044	-4.576	-0.235	0.046	-5.079
International war	-0.083	0.055	-1.503	-0.082	0.056	-1.460
Resource Dependence t-1	-0.001	0.001	-1.788	-0.001	0.001	-1.116
Country and Year FE		No			Yes	
Observations		5,539			5,539	

Table A18. Regional latent conflict, diffusion of repression and democracy, 1955-2007.

VARIABLES	Model A22 SLX			Model A23 SDM		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	1.164	0.688	1.691	1.148	0.683	1.681
Lagged DV	0.719	0.013	53.306	0.691	0.014	48.203
Spatial coefficient ρ t-1	--	--	--	0.100	0.016	6.248
Spatial lag of democracy t-1	0.079	0.077	1.028	-0.116	0.081	-1.425
Electoral Democracy index t-1	0.219	0.078	2.807	0.278	0.078	3.573
Regional latent conflict t	-0.007	0.012	-0.589	-0.004	0.012	-0.323
Domestic latent conflict t	-0.026	0.011	-2.457	-0.027	0.010	-2.564
GDP growth t-1	0.001	0.002	0.277	0.001	0.002	0.456
GDP/capita ln t-1	0.089	0.032	2.779	0.077	0.032	2.415
Population (1000s) ln t-1	-0.321	0.066	-4.837	-0.289	0.066	-4.375
Civil war	-0.254	0.047	-5.453	-0.235	0.046	-5.079
International war	-0.086	0.057	-1.520	-0.082	0.056	-1.464
Resource Dependence t-1	-0.001	0.001	-0.892	-0.001	0.001	-1.125
Country and Year FE		Yes			Yes	
Observations		5,539			5,539	

Table A19. Global m-STAR model of connectivity, 1947-2007.

VARIABLES	m-STAR Model A24		
	Coef.	Std. Error	Z-Score
(Intercept)	2.901	0.787	3.686
Lagged DV	0.684	0.014	49.515
<u>Spatial coefficient ρ by:</u>	--	--	--
Region	0.092	0.014	6.405
Inverse democratic distance	0.026	0.018	1.411
Alliance	0.046	0.012	3.674
Spatial lag of democracy t-1	--	--	--
Electoral democracy index t-1	0.244	0.069	3.536
GDP growth t-1	0.001	0.002	0.291
GDP/capita ln t-1	0.076	0.031	2.433
Population (1000s) ln t-1	-0.346	0.062	-5.601
Civil war	-0.235	0.046	-5.149
International war	-0.063	0.053	-1.192
Resource Dependence t-1	-0.001	0.001	-1.159
Country and Year FE		Yes	
Observations		5,870	

Table A20. Main models without resource dependence control, 1947-2007.

VARIABLES	Model A25 NS			Model A26 NS + FE		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.079	0.086	-0.919	-0.210	0.273	-0.769
Lagged DV	0.847	0.009	90.270	0.725	0.012	60.734
Spatial coefficient ρ t-1	--	--	--	--	--	--
Spatial lag of democracy t-1	--	--	--	--	--	--
Electoral Democracy index t-1	0.364	0.039	9.421	0.387	0.061	6.381
GDP growth t-1	-0.013	0.054	-0.242	-0.047	0.052	-0.894
GDP/capita ln t-1	0.047	0.009	5.211	0.179	0.022	8.075
Population (1000s) ln t-1	-0.054	0.006	-8.869	-0.161	0.021	-7.761
Civil war	-0.218	0.035	-6.231	-0.272	0.038	-7.100
International war	-0.043	0.044	-0.986	-0.052	0.045	-1.149
Country and Year FE		No			Yes	
Observations		7,137			7,137	

VARIABLES	Model A27 SAR			Model A28 SLX		
	Coef.	Std. Error	Z-Score	Coef.	Std. Error	Z-Score
(Intercept)	-0.153	0.270	-0.565	-0.194	0.273	-0.709
Lagged DV	0.687	0.013	54.183	0.723	0.012	60.462
Spatial coefficient ρ t-1	0.119	0.014	8.406	--	--	--
Spatial lag of democracy t-1	--	--	--	0.188	0.074	2.545
Electoral Democracy index t-1	0.346	0.060	5.751	0.311	0.067	4.673
GDP growth t-1	-0.043	0.052	-0.824	-0.047	0.052	-0.904
GDP/capita ln t-1	0.148	0.022	6.682	0.174	0.022	7.813
Population (1000s) ln t-1	-0.141	0.021	-6.886	-0.166	0.021	-7.928
Civil war	-0.269	0.038	-7.115	-0.274	0.038	-7.163
International war	-0.064	0.045	-1.427	-0.053	0.045	-1.168
Country and Year FE		Yes			Yes	
Observations		7,137			7,137	

	Model A29 SDM		
VARIABLES	Coef.	Std. Error	Z- Score
(Intercept)	-0.227	0.257	-0.883
Lagged DV	0.686	0.013	53.813
Spatial coefficient ρ t-1	0.123	0.015	8.040
Spatial lag of democracy t-1	-0.062	0.079	-0.787
Electoral Democracy index t-1	0.374	0.066	5.655
GDP growth t-1	-0.039	0.052	-0.745
GDP/capita ln t-1	0.153	0.022	7.054
Population (1000s) ln t-1	-0.133	0.020	-6.693
Civil war	-0.269	0.038	-7.105
International war	-0.066	0.045	-1.466
Country and Year FE	Yes		
Observations	7,137		

A5. List of countries by geo-political region based on Varieties of Democracy.

Eastern Europe and Central Asia	Latin America	MENA	Sub-Saharan Africa
Albania Armenia Azerbaijan Belarus Bosnia and Herzegovina Bulgaria Croatia Czech Republic Georgia Hungary Kazakhstan Kyrgyzstan Latvia Lithuania Macedonia Moldova Mongolia Poland Romania Russia Serbia Slovakia Slovenia Tajikistan Turkmenistan Ukraine Uzbekistan	Argentina Brazil Chile Colombia Costa Rica Cuba Dominican Republic Ecuador El Salvador Guatemala Honduras Mexico Nicaragua Panama Peru Uruguay	Algeria Bahrain Egypt Iran Iraq Israel Jordan Kuwait Lebanon Libya Morocco Oman Qatar Saudi Arabia Syria Tunisia Turkey UAE	Angola Benin Botswana Burkina Faso Burundi Cameroon Central African Republic Chad Comoros Democratic Republic of the Congo Djibouti Equatorial Guinea Ethiopia Gabon Ghana Guinea Guinea-Bissau Ivory Coast Kenya Lesotho Liberia Madagascar Malawi Mauritania Mauritius Mozambique Namibia Niger Nigeria Republic of the Congo Rwanda Senegal Sierra Leone Tanzania The Gambia Uganda Zambia

West Europe and North America	East-Asia	South-East Asia	South Asia	The Caribbean
Australia Austria Belgium Canada Cyprus Denmark France Germany Greece Ireland Italy Netherlands New Zealand Norway Portugal Spain Sweden Switzerland United Kingdom United States of America	China Japan North Korea South Korea	Burma/Myanmar Cambodia Indonesia Laos Malaysia Philippines Singapore Thailand	Afghanistan Bangladesh India Nepal Pakistan Sri Lanka	Jamaica Trinidad and Tobago

A6. Summary statistics by political region for variables in Models 1-5 in the main text, 1947-2007.

	Human Rights Score	Electoral Democracy Index	GDP Growth	Ln GDP/capita	Ln Population Size	Civil War	International War	Resource Dependence
E. Europe and C. Asia								
Mean	0.024	0.397	0.507	8.588	8.872	0.017	0.002	5.259
Median	-0.120	0.268	-0.107	8.701	8.931	0.000	0.000	2.577
Std. Dev.	1.323	0.267	1.545	0.764	1.075	0.131	0.040	6.982
Latin America								
Mean	-0.710	0.426	0.895	8.424	9.015	0.041	0.009	2.331
Median	-0.525	0.386	0.128	8.427	8.786	0.000	0.000	0.997
Std. Dev.	1.087	0.268	2.002	0.562	1.237	0.198	0.095	3.201
MENA								
Mean	-0.762	0.208	5.061	9.059	8.784	0.040	0.050	15.767
Median	-0.720	0.159	0.620	8.930	8.726	0.000	0.000	7.633
Std. Dev.	1.005	0.194	14.122	0.976	1.439	0.196	0.217	20.967
Sub-Saharan Africa								
Mean	-0.401	0.289	-0.169	7.488	8.375	0.022	0.005	6.851
Median	-0.323	0.218	-0.676	7.408	8.481	0.000	0.000	0.188
Std. Dev.	1.089	0.180	1.399	0.674	1.298	0.148	0.073	14.695
W. Europe and N. America								
Mean	1.124	0.799	5.094	9.761	9.377	0.002	0.014	2.386
Median	1.113	0.851	0.616	9.862	9.142	0.000	0.000	0.822
Std. Dev.	1.209	0.159	7.324	0.595	1.300	0.044	0.116	4.638
East Asia								
Mean	-0.930	0.357	0.356	8.228	11.358	0.009	0.088	4.990
Median	-1.348	0.111	-0.538	7.842	10.785	0.000	0.000	1.432
Std. Dev.	1.399	0.332	1.741	1.193	1.562	0.094	0.285	7.556
South-East Asia								
Mean	-1.266	0.272	2.331	7.842	9.971	0.148	0.055	2.760
Median	-1.537	0.258	0.056	7.704	10.131	0.000	0.000	1.135
Std. Dev.	0.992	0.155	6.260	0.958	1.241	0.356	0.227	3.825
South Asia								
Mean	-1.157	0.402	-0.761	7.352	10.811	0.152	0.124	0.411
Median	-1.299	0.417	-0.827	7.299	9.993	0.000	0.000	0.111

Std. Dev.	1.005	0.242	0.260	0.477	1.577	0.360	0.330	0.546
The Caribbean								
Mean	0.751	0.642	4.289	8.943	7.364	0.000	0.000	13.267
Median	0.738	0.636	3.431	8.881	7.304	0.000	0.000	9.098
Std. Dev.	0.855	0.100	4.134	0.475	0.375	0.000	0.000	11.299